Title (en)

INTERPOLATION FILTER WITH MOTION COMPENSATION

Publication

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Application

EP 86307336 A 19860924

Priority

US 78094485 A 19850927

Abstract (en)

[origin: EP0217628A2] A video signal interpolation includes a frame interpolation filter (402) which generates from a video input signal (Y) by interpolation from corresponding elements of immediately preceding and following fields, a frame interpolated output signal tending to exhibit motion artefacts. A second filter (430) provides a line interpolated signal having picture elements spatially and temporally coincident with corresponding elements of the frame interpolated signal and having a suppressed vertical detail component. A third filter (440) attenuates the vertical detail component of the frame interpolated signal. An output circuit (461, 450) combines the signals of the three filters to provide a frame interpolated video output signal (Yi) in which the vertical resolution of the video input signal (Yd) is preserved and motion artefacts characteristic of frame interpolation are atteruated. The interpolator of the invention is particularly suitable for providing the required interpolated video signal in progressive scan display systems in which a delayed and time-compressed video signal derived from a video input signal is displayed line-by-line alternatingly with an interpolated video signal obtained by interpolation from the input signal.

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